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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,483	09/26/2003	Ulrich Bonne	H0006099(1100.1239101)	8252
128	7590	05/16/2006	EXAMINER	
HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245			FITZGERALD, JOHN P	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/672,483	Applicant(s) BONNE, ULRICH	
	Examiner John P. Fitzgerald	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Previous rejections of claims 6-9 under 35 U.S.C. § 112 second paragraph are withdrawn in view of Applicant's amendment of the claims.

2. Applicant's arguments filed 07 March 2006 have been fully considered but they are not persuasive.

3. In response to applicant's argument that the Prior Art references cannot be combined, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In the instant case, Applicant argues that miniature or micro devices cannot be combined with larger, Prior Art devices and/or teachings, the Examiner respectfully disagrees. Clearly, technology in the last decade or so has led to the miniaturization of all types of devices, however, the fundamental processes underlying the operation/functioning of the devices remain basically unchanged, as well as the physical and/or chemical processes occurring within these devices. One of ordinary skill in the art would be well aware of the Prior Art, and all of its teachings/methods and be able to employ in any type of device, miniature/micro or otherwise. Applicant further argues that there is no motivation to combine the Prior Art references, suggesting that the Examiner has employed teachings from the instant specification. The Examiner completely disagrees. As pointed out in the rejection below, as well as by the Applicant, the Examiner clearly pointed out motivations to combine the

Art Unit: 2856

references, from the Prior Art references themselves. These specific motivations do not appear in the instant specification.

4. Furthermore, it must be stated that a conclusion of obviousness may be made from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference (see *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969)), with skill being presumed on the part of the artisan, rather than the lack thereof (see *In re Sovish* 769 F.2d 738, 742, 226 USPQ 771, 774 (Fed. Cir. 1985)); further, references may be combined although none of them explicitly suggests combining one with the other (see *In re Nilssen* 7 USPQ2d 1500 (Fed. Cir. 1989)). It has long been the law that the motivation to combine need not be found in prior art references, but equally can be found "in the knowledge generally available to one of ordinary skill in the art." *In re Jones*, 958 F.2d 347, 351 (Fed. Cir. 1992) (citing *In re Fine*, 837 F.2d 1071, 1074 (Fed. Cir. 1988)). The motivation to combine can be found either in a prior art reference, or it can be implicit in the knowledge of one of ordinary skill in the art. See *In re Huston*, 308 F.3d 1267, 1280 (Fed. Cir. 2002); *Motorola, Inc. v. Interdigital Tech. Corp.*, 121 F.3d 1461, 1472 (Fed. Cir. 1997). Sources suggesting a combination may be: (1) the combined teachings of the prior art, (2) the knowledge of the ordinary practitioner and (3) the nature of the problem to be solved. "The test for implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed.Cir. 2000). In *Richard Ruiz and Foundation Anchoring Systems, Inc. v. A.B. Chance Company*, No. 03-1333 (Fed. Cir. January 29, 2004), the court emphasized that an "express written teaching in the art" to combine

Art Unit: 2856

references **was not required** (emphasis added). Rather, motivation may come from "the nature of a problem to be solved, leading inventors to look to references relating to possible solutions to that problem." In the instant case, along with the specific motivations provided in the rejection below, one of ordinary skill in the art would clearly be motivated to employ the specific teachings of the Prior Art references and make the proper combination as a result of their teachings and disclosures.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

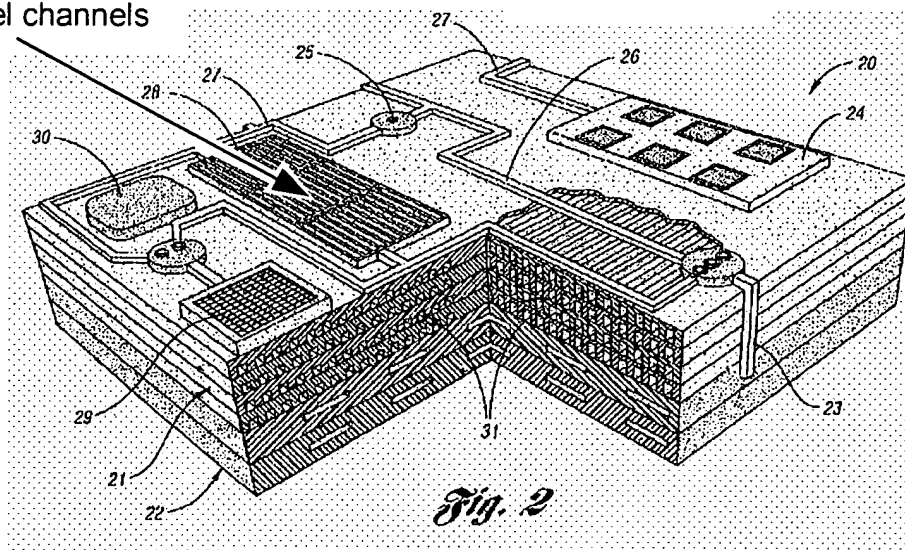
6. Claims 1-9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US 6,838,640 to Wise et al., US 5,300,758 to Roundbehrer et al. and US 5,196,039 to Philips et al. Wise et al. disclose a fluid analyzer (see Fig. 2 below) including a pump (22) a pre-concentrator (28) having a plurality of parallel channels, a multi-zone separator (31) (Fig. 4) (i.e. first and second separators, as recited in claim 3) connected to the pre-concentrator, the separator also with a plurality of parallel channels and detectors (pressure sensors and temperature sensors) as well as a plurality of individually-controllable (i.e. a controller connected, as recited in claim 5) heaters distributed along a length of the plurality of parallel channels of the separator in each zone. Wise et al. do not specifically disclose a concentrator connected to the pre-concentrator (i.e. plural concentrators) (as recited in claim 1), a plurality of heater elements within the concentrator or a second plurality of heater elements with the channels of the pre-concentrator

Art Unit: 2856

(as recited in claim 2 and 4), first and second pumps connected to the pre-concentrator and separator.

pre-concentrator
with a plurality of
parallel channels

Wise et al.



Roundbehler et al. disclose a fluid analyzer having many of the recited elements of instant claim 1 including but not limited to: a pump (54) and two separators (60 and 64) as well as first and second concentrators (38, 40) connected to one another (see Fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ more than one concentrator connected to one another, as taught by Roundbehler et al., modifying the fluid analyzer disclosed by Wise et al., thus providing means to permit rapid concentration of vapors (Roundbehler et al.: col. 2, lines 28-31). Phillips et al. disclose a fluid analyzer (Figs. 1-4e) having many of the recited elements including a concentrator having a heater that comprises a “thin electrically conductive film” or “conductive wall tube/channel,” wherein the resistance (i.e. heating) may be varied by varying the thickness of the electrically conductive film, and a “thermal gradient in time” can be created by varying the electric current through the electrically

Art Unit: 2856

conductive film as a function of time (i.e. thermal/electrical pulses) (Phillips et al.: col. 12, lines 51-58, claim 20), and thus capable of creating “moving temperature/heat/gradient zones” wherein the rate of movement is approximately the same as the fluid moving through the channel (as recited in claim 9) (Phillips et al.: col. 19, lines 25-30 and col. 20, lines 19-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a heater as taught by Phillips et al., modifying the individual heating elements disclosed by Wise et al. and employing them within the channels of the pre-concentrator of the fluid analyzer disclosed by both Wise et al. and Roundbehrer et al., thus providing a fluid analyzer to provide “thermal modulation to accumulate and focus, refocus and then accelerate a concentration pulse in the carrier stream” without the loss of orthogonality (Phillips et al.: col. 4, lines 55-69). In specific regards to claims 6-8, the employment of multiple pumps and detectors at any desired location (i.e. connected to any portion/element) of a fluid analyzer would be considered well within the skill set of one of ordinary skill in the art to provide the necessary pressure gradient and movement of fluid through the fluid analyzer at a chosen/desired rate, and also providing monitoring of the fluid’s physical state (i.e. pressure, temperature) within the various stages/elements of the analyzer to monitor/detect the fluid moving through the analyzer.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

Art Unit: 2856


MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Fitzgerald whose telephone number is (571) 272-2843. The examiner can normally be reached on Monday-Friday from 7:00 AM to 3:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams, can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JF

05/15/2006



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